IN THE CLAIMS:

1. (Original) A method for manufacturing a carbon molecular sieve, comprising:

(a) impregnating pores of a mesoporous silica molecular sieve, used as a template, with a mixture of a silica oligomer, a condensable or polymerizable carbon-containing compound, used as a carbon precursor, and a liquid carrier;

(b) polymerizing the carbon precursor to form a carbon precursor polymer within the pores of the template;

(c) carbonizing the carbon precursor polymer using pyrolysis; and

(d) removing the template and the silica oligomer using a solution capable of dissolving silica.

2. (Original) The method according to claim 1, wherein the template is selected from the group consisting of MCM-48, KIT-1, MSU-1, SBA-1, SBA-3, SBA-15, and SBA-16.

3. (Original) The method according to claim 1, wherein an average particle size of the silica oligomer is 0.5 to 5 nm.

4. (Original) The method according to claim 1, wherein the carbon precursor is a carbohydrate.

5. (Original) The method according to claim 4, wherein the carbohydrate is selected from the group consisting of monosaccharide, oligosaccharide, and a mixture thereof.

6. (Original) The method according to claim 1, wherein the carrier is selected from the group consisting of water, an organic solvent, and a mixture thereof.

7. (Original) The method according to claim 6, wherein the organic solvent is alcohols.

8. (Original) The method according to claim 7, wherein the alcohol is ethanol.

9. (Original) The method according to claim 1, wherein the mixture further comprises an acid.

10. (Original) The method according to claim 9, wherein the acid is selected from the group consisting of sulfuric acid, hydrochloric acid, nitric acid, sulfonic acid, and a mixture thereof.

11. (Original) The method according to claim 1, wherein step (b) comprises heating the template at a temperature range of 50 to 250 .

12. (Original) The method according to claim 1, wherein step (b) comprises:

(b-1) first heating the template at a temperature range of 50 to 150 ; and

(b-2) second heating the template at a temperature range of 150 to 250 .

13. (Original) The method according to claim 1, wherein step (c) comprises heating the template at 400 to 1,400 under a non-oxidizing atmosphere.

14. (Original) The method according to claim 13, wherein the non-oxidizing atmosphere is selected from the group consisting of a vacuum atmosphere, a nitrogen atmosphere, and an inert gas atmosphere.

15. (Original) The method according to claim 1, wherein the silica dissolving solution in step (d) is an aqueous fluoric acid solution or an aqueous sodium hydroxide solution.

16. (Original) The method according to claim 1, further comprising once or more repeating steps (a) and (b) before step (c).

17. (Original) A method for manufacturing a carbon molecular sieve, the method comprising:

(a) impregnating micropores of an ordered mesoporous silica molecular sieve, used as a template, having the mesopores and the micropores that are responsible for the connections between the mesopores, with a first mixture of a condensable or

polymerizable carbon-containing compound, used as a carbon precursor, and a liquid carrier;

(b) polymerising the carbon precursor within the micropores of the template to form a carbon precursor polymer within the micropores of the template;

(c) impregnating the mesopores of the template with a second mixture of a silica oligomer, a condensable or polymerizable carbon-containing compound, used as a carbon precursor, and a liquid carrier;

(d) polymerising the carbon precursor within the mesopores of the template to form a carbon precursor polymer within the mesopores of the template;

(e) carbonizing the carbon precursor polymers within the template using pyrolysis; and

(f) removing the template and the silica oligomer using a solution capable of dissolving silica.

18. (Original) The method according to claim 17, wherein the template is selected from the group consisting of SBA-15 and SBA-16.

19. (Original) The method according to claim 17, wherein an average particle size of the silica oligomer in the second mixture is 0.5 to 5 nm.

20. (Original) The method according to claim 17, wherein the carbon precursors in the first and the second mixtures are a carbohydrate.

21. (Original) The method according to claim 20, wherein the carbohydrate is selected from the group consisting of monosaccharide, oligosaccharide, and a mixture thereof.

22. (Original) The method according to claim 17, wherein the liquid carriers in the first and the second mixtures are each selected from the group consisting of water, an organic solvent, and a mixture thereof.

23. (Original) The method according to claim 22, wherein the organic solvent is alcohols.

24. (Original) The method according to claim 23, wherein the alcohol is ethanol.

25. (Original) The method according to claim 17, wherein the first and the second mixtures further comprise an acid.

26. (Original) The method according to claim 25, wherein the acid is selected from the group consisting of sulfuric acid, hydrochloric acid, nitric acid, sulfonic acid, and a mixture thereof.

27. (Original) The method according to claim 17, wherein step (b) comprises heating the template at a temperature range of 50 to 250 .

28. (Original) The method according to claim 17, wherein step (b) comprises:

(b-1) first heating the template at a temperature range of 50 to 150 ; and

(b-2) second heating the template at a temperature range of 150 to 250 .

29. (Original) The method according to claim 17, wherein step (d) comprises heating the template at a temperature range of 50 to 250 .

30. (Original) The method according to claim 17, wherein step (d) comprises:

(d-1) first heating the template at a temperature range of 50 to 150 ; and

(d-2) second heating the template at a temperature range of 150 to 250 .

31. (Original) The method according to claim 17, wherein step (e) comprises heating the template at 400 to 1,400 under a non-oxidizing atmosphere.

32. (Original) The method according to claim 31, wherein the non-oxidizing atmosphere is selected from the group consisting of a vacuum atmosphere, a nitrogen atmosphere, and an inert gas atmosphere.

33. (Original) The method according to claim 17, wherein the silica dissolving solution in step (f) is an aqueous fluoric acid solution or an aqueous sodium hydroxide solution.

34. (Original) The method according to claim 17, further comprising once or more repeating steps (c) and (d) before step (e).

35. (Original) A carbon molecular sieve having mesopores and micropores, in which the total volume of pores with a size of 80 nm or less is 1.0 /g or more and the microporosity is 35% or more.

36. (Original) The carbon molecular sieve according to claim 35, wherein the carbon molecular sieve comprises carbon meso-rods and carbon micro-rods,

the carbon micro-rods providing connections between the carbon meso-rods, and

the carbon meso-rods forming an internal structure while in a state of being supported by the carbon micro-rods.

37. (Currently Amended) A catalyst for a fuel cell comprising a porous catalyst carrier and catalytic metals positioned on pores of the catalyst carrier,

the catalyst carrier being ~~the~~ a carbon molecular sieve ~~according to claim 35 or claim 36.~~ having mesopores and micropores, in which the total volume of pores with a size of 80 nm or less is 1.0 cm^3/g or more and the microporosity is 35% or more.

38. (Currently Amended) ~~A fuel cell using the catalyst~~ The catalyst for a fuel cell according to claim 37, wherein the carbon molecular sieve comprises carbon meso-rods and carbon micro-rods,

the carbon micro-rods providing connections between the carbon mesorods, and

the carbon meso-rods forming an internal structure while in a state being supported by the carbon micro-rods.

39. (New) A fuel cell using a catalyst comprising a porous catalyst carrier and catalytic metals positioned on pores of the catalyst carrier,

the catalyst carrier being a carbon molecular sieve having mesopores and micropores, in which the total volume of pores with a size of 80 nm or less is 1.0 cm^3/g or more and the microporosity is 35% or more.

40. (New) The fuel cell according to claim 39, wherein the carbon molecular sieve comprises carbon meso-rods and carbon micro-rods,

the carbon micro-rods providing connections between the carbon mesorods, and

the carbon meso-rods forming an internal structure while in a state of being supported by the carbon micro-rods.